

(19)



JAPANESE PATENT OFFICE

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PATENT ABSTRACTS OF JAPAN

(11) Publication number: 02018296 A

(43) Date of publication of application: 22.01.90

(51) Int. Cl **B66D 1/46**
B66C 13/22
B66C 13/23
B66C 13/48
B66D 1/54

(21) Application number: 63167788

(22) Date of filing: 07.07.88

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(54) VERTICAL VIBRATION PREVENTIVE OPERATION
CONTROL METHOD FOR LIFTING LOAD

amount of winding is obtained.

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(57) Abstract:

PURPOSE: To prevent a vertical vibration so as to improve the safety by performing a process of lifting a load up and down at a maximum speed thereafter adequately damping the vibration of the lifting load generated during the time of that process, in the case of a crane which automatically controls the lifting load in its moving motion.

CONSTITUTION: An arithmetic processing unit 4 inputs a winding target rope length from a cargo handling data while weight M of a lifting load 2 and a rope length in the traversing start time. The arithmetic processing unit 4 determines a maximum lifting speed from the weight M by a fixed output control to be input to an operation unit 6. The operation unit 6 performs lifting increasing a speed so as to obtain that speed. While the arithmetic processing unit 4 determines the operation time at this maximum lifting speed by a fuzzy controller simultaneously calculates deceleration corresponding to this operation time. The operation unit 6 switches the lifting speed being based on these values, lifting the load to reach a lifting position where a predetermined

